## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **LISTING OF CLAIMS:**

- 1. (Currently Amended) A system for providing thermal energy to a thermodynamic machine for generating electrical power, comprising,
- a heat storage device for storing <u>a</u> thermal energy <u>medium in an insulated</u> <u>storage area;</u>
- a first heat transfer means for transferring thermal energy from the <u>thermal</u> <u>energy medium in the insulated storage area of the</u> heat storage device to the thermodynamic machine for generating electricity,
- first heat generating means for generating heat from heating the thermal energy medium using electrical energy supplied to the heat storage device, wherein said first heat generating means is contained within the insulated storage area of the heat storage device.
  - 2. (Cancelled)
- 3. (Previously Presented) The system according to claim 1, further comprising:

second heat generating means for providing thermal energy to the thermodynamic machine; and

wherein the second heat generating means comprise a second working fluid circuit with a second working fluid connectable to the thermodynamic machine, and a controllable heat source for heating the second working fluid.

- 4. (Previously Presented) The system according to claim 3, wherein the first heat transfer means comprise a first working fluid circuit with a first working fluid connectable to the thermodynamic machine, wherein the second working fluid circuit and the first working fluid circuit coincide.
- 5. (Currently Amended) The system according to claim 1, wherein the first heat generating means comprise an ohmic resistor inside the <u>insulated storage</u> area of heat storage unit or a heat pump.
- 6. (Currently Amended) The system according to claim 1, wherein the heat storage device comprises a heat storage thermal energy medium which is in a solid state at a lower temperature level of the storage device.
- 7. (Currently Amended) The system according to claim 6, wherein the heat storage thermal energy medium is in a solid state at the higher temperature level of the heat storage device.
- 8. (Previously Presented) The system according to claim 1, wherein the first heat transfer means comprises a controllable heat resistance for controlling the heat transfer.

- 9. (Currently Amended) A method for generating electrical power in response to an electrical power demand in a system having a heat storage device that includes an insulated storage area and first heat generating means in the insulated storage area, the method comprising,
- heating <u>a heat storage medium stored in said insulated storage area of</u> said heat storage device via the first heat generating means by converting electrical power from an electrical power supply that exceeds an electrical power demand,
- transferring, via first heat transfer means, thermal energy from the <u>heated</u>

  <u>heat storage medium of the</u> heat storage device to a thermodynamic machine for generating electricity; and
- generating, via the first heat generating means, heat from the electrical power.
- 10. (Previously Presented) The method according to claim 9, wherein the electrical power demand and/or supply do take into account economical considerations.
- 11. (Previously Presented) The system according to claim 1, wherein it comprises a second heat generating means for providing thermal energy to the thermodynamic machine.